

## CLAIMS

We claim:

- 1     1.     A saw blade, comprising:
  - 2             an elongated body having a longitudinal edge and defining a plane of main extension;
  - 3             a plurality of protrusions each being located in the region of said longitudinal edge
  - 4     and each including a seat;
  - 5             a plurality of form bodies each being made of hard cutting material, having a cross
  - 6     section and being connected to one of said seats,
  - 7             each cross section of said form bodies in the plane of main extension at a
  - 8             side facing said respective seat being limited by a line in the form of a circular arc
  - 9             and at a side facing away from said respective seat being limited by a front line of a
  - 10            surface,
  - 11            the line in the form of a circular arc and the front line enclosing a wedge angle
  - 12            which is less than approximately 90 degrees and being designed and arranged to
  - 13            form a free angle;
  - 14            a plurality of cutting portions each extending approximately transverse with respect to
  - 15     the plane of main extension; and
  - 16            a plurality of teeth each being formed by one of said protrusions and said respective
  - 17     form body.
- 1     2.     The saw blade of claim 1, wherein at least one of said form bodies is designed as a
- 2     part of a ball.
- 1     3.     The saw blade of claim 1, wherein at least one of said form bodies is designed as a

2 part of a cylinder.

1 4. The saw blade of claim 2, wherein only the surface limiting said form body at the side  
2 facing away from said seat is ground.

1 5. The saw blade of claim 3, wherein only the surface limiting the form body at the side  
2 facing away from said seat is ground.

1 6. The saw blade of claim 1, wherein the surface is designed as a plain surface.

1 7. The saw blade of claim 2, wherein the surface is designed as a plain surface.

1 8. The saw blade of claim 3, wherein said surface is designed as a plain surface.

1 9. The saw blade of claim 4, wherein said surface is designed as a plain surface.

1 10. The saw blade of claim 5, wherein said surface is designed as a plain surface.

1 11. The saw blade of claim 2, wherein said part of said ball is less than a semi ball.

1 12. The saw blade of claim 3, wherein said cylinder includes a surface area, two faces  
2 and an axis, said part of said cylinder in a transition region being located between said  
3 surface area and said faces having a rounded design, and the axis being located to be  
4 perpendicular with respect to the plane of main extension.

1 13. The saw blade of claim 1, wherein at least some of said teeth are set.

1 14. The saw blade of claim 1, wherein said saw blade is designed to cut abrasive  
2 materials.

1 15. A saw blade for cutting abrasive materials, comprising:  
2 an elongated body having a longitudinal edge and defining a plane of main extension;  
3 a plurality of protrusions each being located in the region of said longitudinal edge  
4 and each including a seat;

5 a plurality of form bodies each being made of hard cutting material, having a cross  
6 section and being connected to one of said seats,

7 each cross section of said form bodies in the plane of main extension at a  
8 side facing said respective seat being limited by a line in the form of a circular arc  
9 and at a side facing away from said respective seat being limited by a front line of a  
10 plain, ground surface,

11 the line in the form of a circular arc and the front line enclosing a wedge angle  
12 which is less than approximately 90 degrees and being designed and arranged to  
13 form a free angle;

14 a plurality of cutting portions each extending approximately transverse with respect to  
15 the plane of main extension; and

16 a plurality of teeth each being formed by one of said protrusions and said respective  
17 form body.

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1 16. The saw blade of claim 15, wherein at least one of said form bodies is designed as a  
2 part of a ball.

1 17. The saw blade of claim 15, wherein at least one of said form bodies is designed as a

2 part of a cylinder.

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1 18. A method of producing a saw blade, said method comprising the steps of:  
2 forming a plurality of protrusions at a longitudinal edge of an elongated body;  
3 forming a seat at each of the protrusions;  
4 connecting a form body being made of hard cutting material to each of the seats;  
5 forming a surface at each of the form bodies at a side facing away from the  
6 respective seat to form a cutting portion of a tooth; and  
7 connecting a round element to each seat in a way that the cutting portion has a  
8 wedge angle which is less than approximately 90 degrees and a free angle is formed.

1 19. The method of claim 18, wherein the form body only at its side facing away from the  
2 seat is ground.

1 20. The method of claim 18, wherein at least some of the teeth are set.

1 21. The method of claim 19, wherein at least some of the teeth are set.

1 22. The method of claim 18, wherein the saw blade serves to cut abrasive materials.